

TO THE

Chairman and Members

OF THE

STOWMARKET URBAN DISTRICT COUNCIL.

Suff

18TH JANUARY, 1905.

GENTLEMEN,

I have the honour of presenting to you my EIGHTH ANNUAL REPORT on the health of Stowmarket for the year ending 31st December, 1904.

VITAL STATISTICS.

I have based the following Statistics on the population at the last census, as at present I can obtain no reliable data of any change one way or the other.

Birth Rate,
21·3 per 1000. During the year there were 89 births (51 males and 38 females), which gives a Birth Rate of 21·3 per 1000. This is about 4 per 1000 above that of last year, but is still very low, being 3 per 1000 under the average of the previous ten years. This rate for the whole Stow Union was 23·6 per 1000, for East Stow District 27·1 per 1000, and for Rural England and Wales 26·8 per 1000.

Death Rate,
14·4 per 1000. The number of Deaths registered during the year was 56 (35 males and 21 females). Four of the persons who died in the Workhouse during the year belonged to Stowmarket, and these, added to the above, give a total of 60, and a Death Rate of 14·4 per 1000, compared with 13·9 last year, and an average of the previous ten years of 14·8 per 1000. This rate for the whole Union was 14·8 per 1000, for the East Stow District 12·0, and for England and Wales 15·3 per 1000.

Infant Mortality,
123 per 1000 Births. There were 11 Deaths registered of Infants under one year of age, equal to an Infant Mortality of 123 per 1000 Births. This is considerably over what it was last year, but compares favourably with the average of the previous ten years, viz., 129 per 1000.

Zymotic Diseases. There were 5 Deaths registered as caused by Zymotic Diseases, viz.: Measles 3, Whooping Cough 1, and Diarrhœa 1, which gives a Zymotic Death Rate of 1·2 per 1000.

Other Deaths. Amongst the other Deaths, you will see by Table IV. that 5 were caused by Phthisis, only 3 by Cancer, 10 by Diseases of the Respiratory Organs, 6 by Accidents (an unusually large number), 8 by Heart Disease, and only 2 were returned as due to Old Age, but 13 persons who died, out of the total 60, had passed the age of 70 years.

INFECTIOUS DISEASES.

During the year, there were epidemics of Measles, Whooping Cough, and Influenza, generally of mild types; also, a slight outbreak of Scarlet Fever, of a severer type than we have had lately, but fortunately there were no deaths.

The number of notifications of Infectious Diseases was 30, as compared with 12 last year. The cases notified were :—Diphtheria 3 (compared with 5 last year), Erysipelas 3 (the same as last year), Scarlet Fever 20 (compared with 3 last year and 1 the year before), and Enteric Fever 4 (compared with 1 last year).

- Diphtheria.** The 3 cases of Diphtheria occurred in October, and it was found, on inspection, that in one case the sink water pipe was defectively trapped, and the water polluted. In another, no sanitary defect was found, and in the third the kitchen wall was soaked with waste sink water on account of the defective construction of the drains.
- Erysipelas.** With regard to the cases of Erysipelas, in one case, on inspection, it was found that the rain water pipe acted as a sewer ventilator outside a bedroom window (the one used by the patient), and there were also various other sanitary defects. The other two cases seemed to be caused by a general want of personal cleanliness.
- Enteric Fever.** The 4 cases of Enteric Fever were in no way connected with each other, and no cause could be found for the outbreak, although in one of the cases the surroundings were exceedingly insanitary.
- Scarlet Fever.** The 20 cases of Scarlet Fever were scattered over the town ; half of them were confined to two families. Twelve of the cases were treated in the Isolation Hospital, which was opened on the 7th July and closed 5th January this year. The average time in Hospital for each case was 6 weeks and 5 days. Except in the case of the family of six, first taken to the Hospital, the disease was confined to the patient, in all cases removed to the Hospital.
- Bake-houses.** The Bake-houses were inspected twice during the year, and occasionally surprise visits were made. They were all found to be in a satisfactory sanitary condition.
- Slaughter-houses.** The Slaughter-houses were also visited and inspected systematically. In three cases, the flooring and drainage were defective, and in each case a new cement floor has been constructed and the drainage put in repair.
- Cow Sheds and Dairies.** The Cow Sheds and Dairies were inspected during the year, and were found in a fairly satisfactory condition.
- Common Lodging-houses.** The Common Lodging-houses were inspected during the year. The vaults in same were done away with, additional w.c. constructed, and connected with the sewer ; also new urinals were constructed. This has been a great improvement.
- Factory Act, 1901.** There are 45 Workshops on the register, and 110 inspections were made during the year. Four insanitary defects were found, and since remedied ; and one case of failure to post list of outworkers, since complied with.
- With regard to the case mentioned last year, of defective closet accommodation, this has since been rectified.
- Refuse Disposal.** The refuse from the houses is removed twice a week, and carted to the outskirts of the town, turned over and sold. I again have to note the need of proper receptacles for refuse. Altogether, 624 loads were removed in the year of house refuse, and 208 loads of night-soil.
- Sewerage and Drainage.** During the year, the Sewer in Crow Street has been totally reconstructed, and all the houses re-connected on to it.
- The Sewer in Lime Tree Place has been completed, and 25 houses connected.
- In Bridge Street, the Sewer has been cleaned out, and new Man-holes constructed.

The Sewers in Tavern Street, Stowupland Street, and Station Road have been condemned, and will be reconstructed next year.

Fifteen loads of sewage was taken out of the Church Lane Sewer, and thirty-five loads of silt removed from the Milton Road Sewer.

The House Drainage at back of Ipswich Street, leading into lower end of Church Lane Sewer, has all been condemned and reconstructed.

In one house, the w.c. was directly over an old brick sewer, and during the alterations fell into it. All the drains were "butt pipes," and as badly put together as it is possible to imagine.

At a house in Bridge Street, the drain was so badly laid that the whole drainage had to be condemned. Although the pipes were of proper construction, they all had to be taken up and relaid.

In several houses it was noted that the drains ran uphill into the sewer, with the natural result.

Three Urinals were condemned and reconstructed. One of these, at a public-house, was so badly constructed that the urine soaked through the wall and "damaged the wall-paper next door."

56 Defective Traps were condemned during the year and reconstructed.

6 Sink Pipes connected directly with the sewer were condemned and properly connected.

12 Rain-water Pipes, directly connected with the sewer, were condemned and disconnected. In one of these cases, a 2-inch Rain-water Pipe was carried through a wall into the top of the syphon of a water-closet pan.

4 Ventilating Shafts were condemned and reconstructed, and one Water-closet Pan, in a public building, was also condemned, and has since been replaced.

House Accommo- dation.

House-to-house inspection was made in certain quarters of the town by the Sanitary Inspector and myself, and several sanitary defects were pointed out to the owners. In one case, where there were four houses and only one filthy closet, the owner has had another water-closet constructed and the other repaired, and both connected with the sewer. One house in Bond Street was found to be very filthy; this has since been cleaned and whitewashed. There were four houses in Bond Street and only one w.c., with the floor broken in; this has since been repaired. In Abbot's Yard, there were 28 individuals of all ages in three 2-roomed cottages, and only one w.c. for the lot; the worst cases of overcrowding have been remedied, but there still remains much to be done here before it can be considered at all approaching a sanitary and healthy condition.

Water Supply.

During the year, I have analysed 14 samples of water from shallow wells in the town, one sample from a pond used for drinking purposes, and four samples taken from different parts of the town, of the Waterworks water.

The 14 samples of well water were, without exception, more or less polluted.

The pond water was polluted owing to house refuse being placed near it.

The four samples from the Waterworks were exceptionally free from any organic impurities, and were all exactly alike.

Four houses near the river have no water supply at all, except the river (which is not in a very safe condition); in fact, for drinking purposes, they have to beg or

steal. The water will probably be laid on to these houses during the coming year by the owner of the property.

The Waterworks water has been laid on to four houses and nine sets of cottages during the year. Last year, five houses and 71 cottages were connected.

The Valve Chambers have nearly all been constructed, and the Flushing of Mains will take place as soon as the work is completed.

On the whole, this last year has shown some good work done in the town, especially with regard to the Reconstruction of Sewers and House Drains, and the doing away of several of those abominations, viz., cesspools.

The opposition to the water supplied by the Company (the only safe supply we have in Stowmarket) is dying out, with the exception of the hopelessly ignorant.

The danger of our Shallow Wells (undoubtedly the gravest sanitary defect in our town) is gradually being recognised; therefore, it is the more surprising that water from this source should still be used in the manufacture of articles for public consumption.

Table I. shows the estimated Population and Birth and Death rates for the last ten years.

Table II. refers to the Factory Act.

Table III. shows the cases of Infectious Diseases notified, and particulars as to the age of the persons affected.

Table IV. shows the causes of, and ages at, death during the year.

In conclusion, I have to acknowledge the great help I have received from the Sanitary Inspector and Surveyor, and to thank the Chairman and Members of the Council for the considerate manner in which they have always received my suggestions.

I have the honour to remain, Gentlemen,

Your obedient Servant,

CHAS. W. LOW, M.B., D.P.H., &c.,

MEDICAL OFFICER OF HEALTH.

TABLE I.

Year.	Population estimated to Middle of each Year.	Births.		Total Deaths registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in the District.	Deaths of Residents registered beyond the District.	Nett Deaths at all Ages belonging to the District.			
		No.	Rate.*	Under 1 year of age.		At all ages.					No.	Rate.*	No.	Rate.*
				No.	Rate per 1000 Births registd.	No.	Rate.*							
1894	4291	117	27·2								53	12·3		
1895	4274	109	25·5								59	14·0		
1896	4256	107	25·1	10	93						58	14·0		
1897	4238	109	25·7	12	110						64	15·1		
1898	4221	98	23·2	17	171	71	16·8			6	77	18·2		
1899	4202	103	24·5	13	126	56	12·8			4	60	14·2		
1900	4185	104	24·8	16	153	70	16·7			1	71	16·9		
1901	4162	114	27·3	20	178	66	15·8			3	69	16·4		
1902	4162	92	24·5	9	97·8	51	12·2			3	54	12·9		
1903	4162	72	17·2	7	97·2	52	12·4			6	58	13·9		
Averages for years 1894-1903		102	24·5	13	129	61	14·5			4	62	14·8		
1904	4162	89	21·3	11	123	56	13·4			4	60	14·4		

* Rates calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water) ... 2177

Total population of all ages ... 4162

Number of inhabited houses ... 962. Average number of persons per house ... 4·4

TABLE III.

Cases of Infectious Disease notified during the Year 1904.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							No. of Cases removed to Hospital from each Locality.
	At all Ages.	At Ages—Years.						
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards	
Diphtheria ...	3					3		12
Erysipelas ...	3					3		
Scarlet Fever ...	20	2	5	11	1	1		
Enteric Fever ...	4				1	3		
Totals ...	30	2	5	11	2	10		12

TABLE II.

Factories, Workshops, Laundries, Workplaces, and Homework.

1.—INSPECTION.										
Premises.					Inspections.	Number of Written Notices.			Prosecutions.	
Factories (including Factory Laundries)					...	20	...	2	...	0
Workplaces					0	...	0
Total					...	110	...	2	...	0

2.—DEFECTS FOUND.										
Particulars.					Number of Defects.					
					Found.		Remedied.			
Sanitary Accommodations—Insufficient					2	...	2
,, ,, Unsuitable or Defective					2	...	2
Failure as regards Lists of Outworkers					1	...	1
Total					5	...	5

3.—OTHER MATTERS.									
Class.								Number.	
Action taken in matters referred by H.M. Inspectors as remedial under the Public Health Acts, but not under the Factory Act :—									
Notified by H.M. Inspector								...	1
Reports (of action taken) sent to H.M. Inspectors								...	1
Total Number of Workshops on the Register								...	45

TABLE IV.

Causes of, and Ages at, Death during the Year 1904.

CAUSE OF DEATH.	DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.						
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.
Small-pox							
Measles	3	1	2				
Scarlet Fever							
Whooping Cough... ..	1		1				
Diarrhœa	1	1					
Phthisis (Pulmonary Tuberculosis)	5				2	3	
Cancer, malignant disease ...	3					1	2
Bronchitis	4	1				2	1
Pneumonia	5	1	3			1	
Other Diseases of Respiratory Organs	1	1					
Alcoholism—Cirrhosis of Liver ...	1					1	
Premature Birth	3	3					
Heart Diseases	8		1			3	4
Accidents	6				3	3	
Suicides							
Apoplexy	5					2	3
Old Age	2						2
All other causes	12	3				6	3
All causes	60	11	7		5	22	15

STOWMARKET

Urban District Council.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR

1904.

Stowmarket Urban District Council.

STOWMARKET,

5TH JULY, 1905.

MEDICAL OFFICER'S REPORT.

GENTLEMEN,

According to the resolution passed by the Council in February, I have now to report that I have analysed the water from 118 wells in Stowmarket. A few well waters have been acknowledged by the owners to be unfit for domestic use (in one case a notice to that effect has been placed on the pump), and one owner objects to have a sample of water taken from his well; with these exceptions the 118, I believe, are all the wells in present use.

Of the 118 I found that seven showed no signs of pollution at the time of examination; eight were suspicious, *i.e.*, they showed signs of past pollution and the surroundings were unsatisfactory—I do not consider that these wells are safe to use as they are dangerously liable to pollution, and therefore I would suggest that notice be served on the owners and the users to that effect; 103 showed signs of recent pollution and are therefore unfit for domestic use. All these wells are of the “shallow well” type and they have been examined during an exceptionally dry season; these wells vary, chemically, according to the rainfall, therefore it would be unsafe to infer that even those seven wells which showed no signs of pollution under the above circumstances would always (*e.g.*, after a wet season,) be fit for domestic use.

The 118 wells are distributed as follows:—

Bridge Street.—19 wells supplying water to the inhabitants of 76 houses. All these wells were dangerously polluted, many containing traces of Nitrites, and over 2 grs. per gallon of Nitric Nitrogen, the Chlorine varying from 3 to 17 grs. per gallon.

Lime Tree Place.—20 wells supplying 88 houses. One well showed no signs of pollution, the rest were polluted; several contained traces of Nitrites—the Nitric Nitrogen varied from $\frac{1}{2}$ to 2 grs. per gallon, and the Chlorine from 2 to 12 grs. per gallon.

Ipswich Road and Street.—10 wells examined. Three showed no signs of pollution and one other was suspicious, six were polluted, and four contained traces of Nitrites, the Nitric Nitrogen varied from 0·75 to above 1 gr. per gallon and the Chlorine from 2 to 13 grs. per gallon.

Milton Road.—Four wells examined. All showed signs of pollution: the Nitric Nitrogen varying from $\frac{1}{2}$ to 1 gr. and the Chlorine from 5 to 9 grs. per gallon.

Church Lane.—Two wells examined (18 houses). Both very polluted; they contained traces of Nitrites. Nitric Nitrogen from 1 to 2 grs. and Chlorine 11 grs. per gallon.

Tavern Street, Finborough Road, and Violet Hill.—13 wells examined (23 houses). Four were suspicious and nine polluted. Nitric Nitrogen from $\frac{1}{2}$ to 1 gr., Chlorine from 3·75 to 9 grs. per gallon.

Station Road.—Three wells examined. All were polluted, the Nitric Nitrogen varied from $\frac{1}{2}$ to 2 grs. and the Chlorine from 7 to 13 grs. per gallon.

Stowupland Street.—Eight wells examined. All were polluted; they were all exceptionally bad in this district. The Nitric Nitrogen varied from $\frac{1}{2}$ to over 2 grs. per gallon and the Chlorine from 10 to 19 grs. Four contained an excess of free Ammonia, and seven traces of Nitrites.

Bury Road and Street.—14 wells examined. One in Bury Road showed no signs of pollution; one in Bury Street was suspicious, and another showed no signs of pollution; eleven were polluted. The Nitric Nitrogen varied from 0·3 to over 2 grs. and the Chlorine from 2 to 15 grs. per gallon.

Union Street, Boud Street, Regent Street, and Cardinals Road.—23 wells examined. One showed no sign of pollution, the rest were badly polluted. Six contained an excess of free Ammonia and eight traces of Nitrites. The Nitric Nitrogen varied from 0·75 to over 2 grs. and the Chlorine from 5 to 26 grs. per gallon.

Crow Street.—One well examined and was found to be suspicious.

The wells showing no signs of pollution are situated as follows :—

- | | | | | | |
|----|-----------------|-----|-----|-----|-------------------------------|
| 1. | Lime Tree Place | ... | ... | ... | (Highest point) |
| 2. | Ipswich Road | ... | ... | ... | (Sparsely populated district) |
| 3. | Ipswich Street | } | ... | ... | (Highest points) |
| 4. | Ipswich Street | | | | |
| 5. | Union Street | ... | ... | ... | ... (Top of hill) |
| 6. | Bury Road | ... | ... | ... | (Sparsely populated district) |
| 7. | Bury Street... | ... | ... | ... | ... (Top of hill) |

These waters were clear and either colourless or of a bluish tint, (compared with golden yellow, brown or brownish-green of a polluted water). Only one contained any sediment and that on examination was found to consist chiefly of decayed wood, from some part of woodwork of the well. None of these waters showed any trace of Nitrites or free Ammonia. The Oxygen absorbed in 15 min. at 212° was under 0·15 grs. per gallon, the Nitric Nitrogen varied from 0·1 to 0·75 grs. per gallon, and the Chlorine from 2·5 to 5 grs. per gallon. The residue left on evaporation was slight in quantity, white in colour, and showed no change in heating.

In all cases where a water showed any sediment it was collected and examined by the microscope and in several cases was found to contain besides many harmless looking animals and debris, three or four species of worms, including the common “thread worm” and its eggs.

Many of the Stowmarket wells are very old, some of them are constructed of flints, the rest of bricks and all without any cement, none of them are brought up above the surrounding surface and properly covered so as to keep out the surface water. A surface well, besides being at a safe distance from a cesspool and on the right side of it, should be water-tight for ten or twelve feet from surface.

During the examination of these wells the want of the above precautions was clearly proved.

All the wells which were free from pollution were situated on the higher ground, with no drains, &c., near, or the drains, &c., were on the lower side, *i.e.*, so that the fall was away from the well. Again, the lower the well was situated in a district, the worse it was polluted.

As examples I may mention the following :—

The well on the left-hand side of *Lime Tree Place* on top of hill contained 0·1 gr. of Nitric Nitrogen and 3 grs. of Chlorine per gallon. The next two wells going down the hill are slightly polluted, the next highly polluted, and the lowest very bad indeed—it contained a large excess of free Ammonia and Nitrites, over 2 grs. of Nitric Nitrogen per gallon, and 11 grs. of Chlorine, &c.

About the middle of *Ipswich Street* two wells were examined at the same time—on either side of the road, the flow being across the road towards the river. The higher placed well contained 0·75 grs. per gallon Nitric Nitrogen and 3·5 grs. per gallon Chlorine; the lower 1 gr. per gallon Nitric Nitrogen and 11 grs. per gallon Chlorine.

Two wells in Bury Street.—The higher placed well 0·5 gr. Nitric Nitrogen and 3 grs. Chlorine per gallon. The lower 2 grs. Nitric Nitrogen and 15 grs. Chlorine per gallon.

Union Street—The well at top of hill under 0·1 gr. Nitric Nitrogen and 5 grs. Chlorine per gallon; the well at the bottom of hill over 2 grs. Nitric Nitrogen and 12 grs. of Chlorine per gallon.

These facts clearly prove the statement made in my Annual Reports, *viz.*, “That through the faulty construction of the shallow wells in Stowmarket and their dangerous surroundings the water in these wells is liable to pollution, especially after heavy rains, and is therefore in all cases an unsafe, and in many a very dangerous, source of supply for domestic purposes.”

To complete the survey of the Stowmarket wells I here add those wells examined by me since I became Medical Officer of Health :—*Ipswich Street*, 2; *Bury Street*, 4; *Bridge Street*, 3; *Lime Tree Place*, 1; *Market Place*, 2; *Violet Hill*, 3; *Tavern Street*, 2; *Stowupland Street*, 3; *Cardinals Road*, 5; *Regent Street*, 5; *Bond Street*, 2; total, 32. Of these, two were passed as safe, both being situated on high ground at either end of the town and with no cesspools or drain within dangerous distance. 30 were condemned, and the wells in most instances have been closed.

Total number of wells examined ...	{	32	Condemned as unfit for use ...	133
		118	Suspicious ...	8
			No signs of pollution...	9
		<hr/>		<hr/>
		150		150

I beg to remain, Gentlemen,

Your obedient servant,

CHAS. W. LOW,

Medical Officer of Health.

